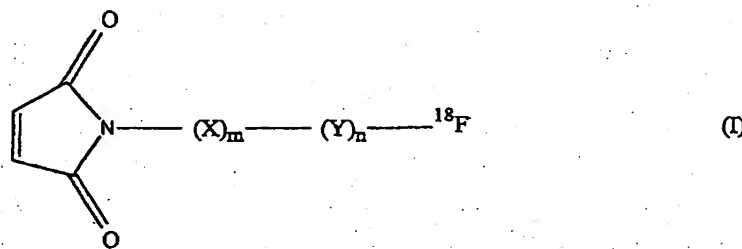


ABSTRACT

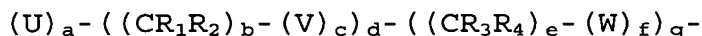
Fluorine-18-labelled maleimide compounds of general formula (I):



in which:

- m represents an integer from 0 to 10;
- n represents an integer from 1 to 10;
- Y represents a group selected from optionally substituted monocyclic or bicyclic heterocyclic groups;

- X represents a radical of formula:



in which:

- a, b, c, d, e, f and g represent each independently an integer from 0 to 10;
- U, V and W represent each independently

-NR₁-, -O-, -S-, $\begin{array}{c} \text{O} \\ | \\ \text{---N---} \end{array}$, ethynyl, -CR₁=CR₂-, -(C=O)-, -(C=S)-, -C(=NR₁)-, -C(=O)O-, -(C=S)S-, -C(=NR₁)NR₂-, -CR₁R₂-, -CR₁OR₂- or -CR₁NR₂R₃-.

Process for preparing these compounds; their use for labelling macromolecules, and complexes of these compounds with a macromolecule.

Detection and analysis kit, or diagnosis kit, comprising the said complexes.

Use of the complexes in a medical imaging process such as positron emission tomography (PET).